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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/627,613 | 07/28/2003 | Yu-Sheng Chen | CHEN3565/Em | 4278 |
| 23364 | 7590 | 01/17/2006 | EXAMINER | |
| BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314 | | | | SOBUTKA, PHILIP |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 2684 |

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/627,613 | CHEN, YU-SHENG |
| | Examiner | Art Unit |
| | Philip J. Sobutka | 2684 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 July 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____ . |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: in page one, lines 20 through 23, applicant states:

“In other words, the prior cellular phone does not provide the feature of multiple way call, i.e. one cellular phone user conveys speeches with two or more cellular phone users simultaneously. “

This statement of the background of the invention is not true. The feature of multiple way, or conference calling is well known in cellular phone systems, as evidenced by the existence of a US Patent classification, class 455, subclass 416, entirely devoted to call conferencing in radiotelephone systems.

Appropriate correction is required.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: “Cellular Phone For Multiple Way Call Using IR Transceiver”.

Claim Objection

3. Claim 1 is objected to because of the following informalities: the claim is grammatically awkward. It has been taken to mean that the IR device can be used to carry out a multi way conference call with other phones equipped with similar IR devices while the phone is engaged in a cellular call via the base station, as described in the

instant specification beginning on page 2, line 25 through page 3, line 7 and as shown in instant figure 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1,2 are rejected under 35 U.S.C. 102(e) as being anticipated by Flannery (US 2003/0092433).

Consider claim 1. Flannery teaches a cellular phone for a multiple way call, comprising:

an IR device (*Flannery's IR device is the local transceiver shown in figure 2, item 230, and described in paragraph 16 as providing IR communication*), the IR device being activated when the cellular phone is in connection with a base station for conveying speeches with a plurality of second cellular phones nearby each having the IR device so that the cellular phone is able to carry out multiple way call with the second cellular phones via the base station or vice versa. Note the claim objection above, this section has been taken to mean that while the phone is engaged in a cellular call via the base station, the IR device can be used to carry out a multiparty call with other phones

equipped with similar IR devices. *Flannery teaches the device's local IR transceiver being used to establish a multiparty conference call with other phones equipped with similar IR devices, as described in paragraphs 3, 16. Flannery teaches that when the device is engaged in a cellular call, the cellular call is mixed with the channels from the other local IR devices as described in paragraphs 4, 15 and 16.*

As to claim 2, Flannery teaches the cellular phone of claim 1, further comprising a speaker coupled to the cellular phone from outside so that speeches conveyed by the cellular phone can be broadcasted by means of the speaker (*Flannery teaches a speaker, shown in figure 2 as item 250 for signals received by the cellular transceiver as described in paragraph 15, lines 15-19.*)

DETAILED ACTION

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3,4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flannery in view of Cupps et al (US 2002/0173344).

Regarding claim 3 Flannery teaches a display and a processor for showing processed data on the display, *Flannery's display is shown in figure 1, and figure 2, as the I/O box in figure 2, and described in paragraphs 14 and 17. Paragraphs 19 and 22 describe the control by the processor.*

Flannery fails to teach that the display is an LCD. However, in a portable communication device, Cupps teaches that LCD's are suitable displays for portable devices (*Cupps paragraph 30*). *Cupps teaches an LCD display that is thin, front lit and touch screen, as described in paragraph 30.* It would have been obvious to one of ordinary skill in the art to modify the display of Flannery to be an LCD display as taught by Cupps in order to utilize a thin, front lit touch screen display.

Flannery also fails to teach that the processor is a microprocessor. *Official notice is taken that the use of microprocessors, meaning a processor that is contained on a single silicon chip, is notoriously well known in the art.* It would have been obvious to one of ordinary skill in the art to modify Flannery to use a microprocessor in order to reduce size and weight by containing the entire processor on a single silicon chip.

Regarding claim 4. Note that Flannery as modified above would have a microprocessor controlling operations of the communication device. Flannery fails to teach a power management module, the power management module being controlled by the microprocessor to supply power of a battery of the cellular phone to each component of the cellular phone.

However in a portable communication device, Cupps teaches a power control module controlled by a processor to supply power of a battery to the device. *Cupps teaches in paragraphs 27 and 40 that by controlling distribution of power to various elements the charge in the battery can be maintained for longer time periods for the priority functions.* It would have been obvious to one of ordinary skill in the art to modify

Flannery to use controlled power management in order to extend the life of a battery charge for priority functions.

8. Claims 5,6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Flannery in view of Cupps et al and in view of Kolev et al (US 5,884,168).

Regarding claim 5. Note that Flannery teaches a processor controlling operations of the device (*Flannery paragraph 22*), and as modified above, the processor would be a microprocessor. Flannery fails to teach a SIM card module having a SIM slot so that the microprocessor is adapted to communicate codes stored on a SIM card inserted in the SIM slot with a base station of a telephone company. *Note that since these stored codes are not described in any special way in the instant specification, these are taken to mean the code, i.e. subscriber identification that is normally used in a convention SIM to allow for communication with a cellular system through a base station.*

However in a similar portable communication device Kolev teaches the use of a slot to insert a SIM card that communicates subscriber identity (code) to allow communication with a telephone system via base stations (*Kolev, see figure 3, item 62, column 6, lines 38-64*). Kolev teaches that the slot is used to make it easy to change out the SIM card to allow the device to be in different systems and by different users as described in column 2, lines 35-48.

It would have been obvious to one of ordinary skill in the art to equip the device of Flannery with a slot to allow for easy change of the subscriber identity, as well as allowing the device to be used in different systems, as taught by Kolev.

Regarding claim 6. Flannery's phone further comprises an RF module including an antenna (*Flannery shows the typical cell phone antenna in figure 1, item 135*), a speaker (*Flannery, shown in figure 2, item 250*), and a microphone (*Flannery see figure 2, item 260*), the RF module being controlled by the microprocessor to activate the antenna for receiving RF signals transmitted from the base station of the telephone company, and the RF signals being converted into sound signals which are converted into sound prior to amplifying by the speaker or the RF module being controlled by the microprocessor to convert speeches of a call into sound waves which are converted into RF signals, and the RF signals being transmitted to the base station of the telephone company via the antenna. (*Flannery describes the use of the conventional mobile telephone arrangement to transmit and receive voice signals through the base stations in paragraph 11 and paragraph 15*).

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flannery in view of Cupps et al and in view of Kolev et al and in view of Neumann et al (US 2002/0173338).

Regarding claim 7, Flannery lacks a teaching of a SRAM so that the microprocessor is adapted to store processed data in the SRAM for carrying out a time division multiplex processing.

In a wireless telephone system Neumann teaches that TDMA is required to comply with the popular GSM and IS-136 standards (*Neumann discusses use of TDMA in the GSM and IS-136 standards in paragraph 3*). Neumann teaches a TDMA processor using an SRAM to perform TDMA processing (*note that Neumann's TDMA*

processor incorporates an SRAM memory, shown as items 204 and 210 in figure 2 and described in paragraph 32). It would have been obvious to one of ordinary skill in the art to equip the wireless telephone of Flannery with the TDMA processing of Neumann (which incorporates SRAM memory) in order to allow the use of TDMA processing and thereby conform to popular GSM and IS-136 standards.

10. Claims 8-11, are rejected under 35 U.S.C. 103(a) as being unpatentable over Flannery in view of Cupps et al and in view of Kolev et al and in view of Neumann et al and in view of Tagawa et al (US 2005/0083794).

Regarding claims 8,10. Flannery lacks a teaching of the cellular phone further comprising a flash RAM so that the microprocessor is adapted to either store user input data in the flash RAM or read data from the flash RAM, the flash Ram being used by a music module so that in response to reading music signals from the flash RAM by the microprocessor, the music module is controlled by the microprocessor to broadcast the music signals from the speaker.

For use in a mobile telephone, Tagawa teaches a flash RAM with a microprocessor is adapted to either store user input data in the flash RAM or read data from the flash RAM, the flash Ram being used by a music module so that in response to reading music signals from the flash RAM by the microprocessor, the music module is controlled by the microprocessor to broadcast the music signals from the speaker (*Tagawa teaches a music module which allows for playback of music files stored into and read from a flash memory as described in paragraphs 626, and 502. Tagawa teaches the playback module can be incorporated into a mobile telephone as described*

in paragraph 662. Note that since Tagawa's flash memory allows for data to be written it is a random access or RAM memory, rather than read only or ROM memory, see paragraph 626).

Therefore it would have been obvious to one of ordinary skill in the art to modify Flannery to use the music module with playback of music stored on a flash memory in order to allow the user to record and listen to stored music on the telephone device.

Regarding claim 9. Flannery lacks a teaching of a ROM so that the microprocessor is adapted to read stored programs from the ROM and process the same by executing the programs.

Cupps teaches a ROM allowing the microprocessor to read and execute stored programs. (*Cupps teaches the ROM is used to store application programs such as calendar, email, and wireless browsing, as described in paragraph 60*).

Therefore it would have been obvious to one of ordinary skill in the art to modify Flannery to use a ROM to store executable programs as taught by Cupps in order to allow the phone user access to applications such as calendar, email and browsing.

As to claim 11, Flannery's phone further comprises a keypad so that it is capable of either operating keys of the keypad to input data or making a call. *Note that Flannery teaches a conventional keypad for initiating a call by inputting data as described in paragraphs 14,19,20)*

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Holt (US 2003/0044654) and Bell (US 6,405,027) have been cited to show other arrangements for using local transceivers to conduct conference calls with cellular phones.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Slobutka whose telephone number is 571-272-7887. The examiner can normally be reached Monday through Friday from 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882.

13. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2684

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PHILIP J. SOBUTKA
PATENT EXAMINER

1/9/06

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